

What is claimed is:

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1. An apparatus for producing a sample of a mainly finely drained and dry material for defining the residual carbon content thereof by defining a change in at least one electrical parameter, comprising:
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- a measuring chamber;
- a screw conveyor connected to the measuring chamber and comprising a rotatable feed screw;
- means for rotating the feed screw for feeding the material to the
- 10 measuring chamber and for compacting the material therein.
2. The apparatus of claim 1, wherein the measuring chamber and the screw conveyor are positioned in a chamber for collecting the material.
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- 15 3. The apparatus of claim 1, wherein the screw conveyor comprises a tubular member for rotatably receiving the feed screw and provided with at least one opening for receiving the material. 4498338
4. The apparatus of claim 1, further comprising means for monitoring the
- 20 torque of the rotating feed screw. 5638202
5. The apparatus of claim 4, wherein the torque monitoring means comprises means responsive to abrupt increases of the torque for terminating rotation of the feed screw.
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6. A method of producing samples of a mainly finely granulated and dry material for determining the residual carbon content of the material, comprising the steps of:
- feeding the material at a predetermined force to a measuring chamber for

compaction therein;
monitoring the force; and
interrupting the feeding of material at an abrupt increase in the force.

5 7. The method of claim 6, wherein the material is fed to the measuring
chamber by a rotating conveyor screw and wherein the force is monitored
as a function of the torque of the conveyor screw.

10 8. The method of claim 7, wherein feeding of the material is interrupted at an
increase in torque by more than 200 percent.

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